

IN THE CLAIMS

Please replace claims 1-24 with the following amended claims.

1. (Amended) A device for electrical contacting or for the isolation of organic or inorganic semiconductors in electronic or optoelectric devices comprising

a substrate, either in the form of

a) a contact material consisting of an organic or inorganic electrical conductor, or

b) an isolating material consisting of an organic or inorganic dielectric, and

a patterned or unpatterned charge transfer material on or at a surface of the substrate wherein the charge transfer material

a) comprises charge transfer components in the form of donors and/or acceptors,

b) forms a self-assembling layer of one or more atomic and/or molecular layers,

c) has a direct or indirect bond to the surface of the substrate, and

d) forms a charge transfer complex with an organic or inorganic semiconductor, wherein the charge transfer material forms a donor or acceptor material in the charge

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transfer complex depending upon respectively whether the semiconductor itself is an acceptor or donor material.

2. (Amended) A device according to claim 1, wherein the bond to the surface of the substrate is a chemical or electrostatic bond or a combination thereof.

3. (Amended) A device according to claim 1, wherein the charge transfer material is an organic compound.

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4. (Amended) A device according to claim 1, wherein the organic compound comprises a functional group which forms the bond to the surface of the substrate.

5. (Amended) A device according to claim 4, wherein the functional group is material selective and forms the bond to a specific substrate material.

6. (Amended) A device according to claim 1, wherein the charge transfer material is provided at the surface of the substrate and the device further comprises a connection layer without charge transfer components provided between the surface of the substrate and the charge transfer material, wherein the connection layer forms a bond to the surface of the substrate and a bond to the charge transfer material.

7. (Amended) A device according to claim 6, wherein the bonds of the connection layer each is a chemical or electrostatic bond or a combination thereof.

8. (Amended) A device according to claim 6, wherein the connection layer is formed of an organic bonding agent.

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9. (Amended) A device according to claim 8, wherein the organic bonding agent is formed of DNA molecules, such that the one half strand of a DNA molecule is bonded to the surface of a substrate and the complementary second half strand of the DNA molecule is bonded to the charge transfer material.

10. (Amended) A device according to claim 1, wherein the charge transfer material is an atomic or molecular inorganic compound.

11. (Amended) A device according to claim 10, wherein the charge transfer inorganic compound is provided on the surface of the substrate and is formed of a material which reacts chemically with the substrate and which forms a connection layer consisting of a chemical compound of the substrate material and the inorganic compound between the substrate and the inorganic compound.

12. (Amended) A device according to claim 10, wherein the charge transfer inorganic compound is provided at the surface of the substrate and the device further comprises a connection layer provided between the substrate and the inorganic compound, wherein the connection layer comprises a chemical compound of the substrate material or a material with similar chemical properties, and the charge transfer inorganic compound.

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13. (Amended) A method for fabricating a device of claim 1 which comprises

providing a charge transfer material as a patterned or unpatterned self-assembling layer of one or more atomic or molecular layers on or at a surface of the substrate, wherein the charge transfer material includes charge transfer components in the form of donors and/or acceptors,

forming a direct or indirect bond between the charge transfer material and the surface of the substrate,

and forming a charge transfer complex of the charge transfer material together with a thereabove adjacently provided organic or inorganic semiconductor, wherein the charge transfer material forms a donor or acceptor material in the charge transfer complex depending upon respectively whether the semiconductor itself is an acceptor or donor material.

14. (Amended) A method according to claim 13, which further comprises forming the bond as a chemical or electrostatic bond or a combination thereof.

15. (Amended) A method according to claim 13, which further comprises selecting the charge transfer material as an organic compound.

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16. (Amended) A method according to claim 15, which further comprises selecting the organic compound with a functional group which forms the bond to the surface of the substrate.

17. (Amended) A method according to claim 16, which further comprises selecting the functional group as a material-selective group such that the bond is formed to a specific substrate material.

18. (Amended) A method according to claim 13, wherein the charge transfer material is provided at the surface of the substrate, and which further comprises providing a connection layer without charge transfer components between the surface of the substrate and the charge transfer material, and forming the connection layer with a bond to the surface of the substrate and with a bond to the charge transfer material.

19. (Amended) A method according to claim 18, which further comprises forming each bond in the connection layer as a chemical or electrostatic bond or a combination thereof.

20. (Amended) A method according to claim 18, which further comprises forming the connection layer of an organic bonding agent.

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21. (Amended) A method according to claim 20, which further comprises forming the organic bonding agent of DNA molecules, such that the one half strand of a DNA molecule is bond to the surface of the substrate and the complementary second half strand of the DNA molecule is bond to the charge transfer material.

22. (Amended) A method according to claim 13, which further comprises selecting the charge transfer material as an atomic or molecular inorganic compound.

23. (Amended) A method according to claim 22, wherein the charge transfer inorganic compound is provided on the surface of the substrate, and which further comprises forming the inorganic compound of a material which reacts chemically with the substrate such that between the substrate and the inorganic compound a connection layer consisting of a

chemical compound of the substrate material and the inorganic compound is formed.

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cond* 24. (Amended) A method according to claim 22, wherein the charge transfer inorganic compound is provided at the surface of the substrate, and which further comprises providing a connection layer consisting of a compound of the substrate material or a material with similar chemical properties, and the inorganic compound, between the substrate and the inorganic compound.
